

**IN THE UNITED STATES DISTRICT COURT  
FOR THE WESTERN DISTRICT OF PENNSYLVANIA**

KONINKLIJKE PHILIPS ELECTRONICS	)	
N.V. and PHILIPS ELECTRONICS NORTH	)	
AMERICA CORPORATION,	)	
	)	
Plaintiffs,	)	
	)	
v.	)	Civil No. 12-1369
	)	Judge Nora Barry Fischer
ZOLL LIFECOR CORPORATION,	)	
	)	
Defendant.	)	

**MEMORANDUM OPINION**

**I. Introduction**

Pending before the Court is Defendant’s Motion to Adopt-in-part, and Modify-in-part, the Special Master’s Final Report and Recommendation on Remand Regarding Supplemental Claim Construction. (Docket No. 409). Plaintiffs oppose Defendant’s motion, and instead request that this Court adopt the Special Master’s Report and Recommendation in full. (Docket No. 412 at 7). For the reasons stated below, this Court GRANTS, in part, and DENIES, in part, Defendant’s Motion. Accordingly, the Court ADOPTS the Special Master’s Final Report and Recommendation, (Docket No. 406), as the Opinion of this Court.

## II. Background

The parties are engaged in wide-scale patent litigation brought in numerous district courts and before the United States Patent and Trademark Office.<sup>1</sup> In the present case, Plaintiffs, Koninklijke Philips N.V. and Philips Electronics North America Corporation (hereinafter “Philips” or “Plaintiffs”) allege Defendant ZOLL Lifecor Corporation, Inc. (hereinafter “ZOLL” or “Defendant”) infringes U.S. Patent Nos. 5,593,427; 5,607,454; 5,735,879; 5,749,904; 5,749,905; 5,803,927; 5,836,978; and 6,047,212 in violation of 35 U.S.C. § 271. (Docket No. 1 at ¶ 1). These patents are directed to methods for electrotherapy related to defibrillation, and Plaintiffs accuse Defendant’s products of infringing them. (Id.). Defendant denies infringement, and puts forth a number of defenses, including that Plaintiffs’ patents are invalid. (Docket No. 24 at 10–12).

At this stage in the litigation, the parties dispute whether the claim term “connecting mechanism” in the ’454 Patent should be considered a means-plus-function claim under 35 U.S.C. § 112(f).<sup>2</sup> Defendant argues that a change in the law promulgated by *Williamson v. Citrix Online, LLC*, 792 F.3d 1339 (Fed. Cir. 2015) (*en banc*) alters the construction of that claim term. (Docket No. 364). Plaintiffs maintain that the change in the law does not affect the construction

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<sup>1</sup> For more on this litigation saga’s history, see *Koninklijke Philips, N.V. v. Zoll Medical Corporation*, No. 10-11041 (D. Mass. filed June 18, 2010); *Koninklijke Philips, N.V. v. Zoll Medical Corporation*, No. 12-12255 (D. Mass. filed Dec. 5, 2012); *Zoll Medical Corporation v. Respironics Inc.*, CA 12-1778 (D. Del. filed Dec. 27, 2012); and related proceedings before the United States Patent and Trademark Office.

<sup>2</sup> Section 112(f) states:

An element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof.

35 U.S.C. § 112(f).

of the claim term, or in the alternative, that the term should be construed to incorporate every structure articulated within the patent. (Docket No. 367).

### **III. Procedural Posture**

On September 24, 2014, this Court issued its Claim Construction Opinion and Order, construing ten disputed claims that the parties brought before the Court and presented to Court-appointed Special Master Gale Peterson, Esq. (Docket Nos. 250, 251). About nine months later, Defendant filed a motion to reopen claim construction, (Docket Nos. 350–51), arguing that *Williamson* requires the Court to evaluate a previously unconstrued claim term, “connecting mechanism.” (Docket No. 351). The Court referred the issue to the Special Master, (Docket No. 354), who recommended reopening claim construction based on the change brought by *Williamson*. (Docket No. 360). After considering the parties’ filings, (Docket Nos. 350–51, 353, 357), as well as the Special Master’s comments, (Docket No. 360), the Court adopted the Report and Recommendation, reopened claim construction relative to this one term, and referred the supplemental claim construction to the Special Master. (Docket No. 361).

Thereafter, the parties briefed the issue, (Docket Nos. 364, 367, 368, 369, 370), and the Special Master produced a Report and Recommendation construing “connecting mechanism.” (Docket No. 371). Plaintiffs requested that the Court adopt the Report and Recommendation, (Docket No. 374), but Defendant sought otherwise, filing a Motion to Adopt-in-part and Modify-in-part same. (Docket No. 375). Upon review of the parties’ submissions, it became clear to the Court that the issue of whether a dependent claim must inherit the “means-plus-function” quality of an independent claim had not been fully briefed by the parties and therefore not fully considered by the Special Master. Thus, the Court convened a telephonic status conference to

discuss this outstanding issue, (Docket No. 390), and after doing so, remanded the supplemental claim construction to the Special Master for further review. (Docket No. 391).

On remand, the parties filed more extensive briefs, (Docket Nos. 393, 399), and the Special Master convened a telephonic conference to provide the parties with an opportunity to discuss their positions. (Docket No. 405). The Special Master then issued a Draft Report and Recommendation, (Docket No. 400), and after further input from the parties, filed a Final Report and Recommendation. (Docket No. 406). Defendant filed the instant Motion to Adopt-in-part and Modify-in-part the Special Master's Final Report and Recommendation. (Docket Nos. 409, 410). Plaintiffs responded to Defendant's Motion, (Docket no. 412), and Defendant replied. (Docket No. 415). The issue is finally ripe for disposition.

#### **IV. Legal Standard**

A District Court reviews a Special Master's Report and Recommendation *de novo*. FED. R. CIV. P. 53(f). "In acting on a Master's order, report, or recommendations, the court . . . may adopt or affirm, modify, wholly or partly reject or reverse, or resubmit to the Master with instructions." FED. R. CIV. P. 53(f)(1).

#### **V. Discussion**

The issue before the Court is whether the term "connecting mechanism," found within independent claim 16 and dependent claim 17 of the '454 Patent, should be construed as a means-plus-function term under 35 U.S.C. § 112(f). Construing a term subject to § 112(f) requires the Court to consider a number of sub issues, including identifying the function and corresponding structure related thereto. *Williamson*, 792 F.3d at 1351 ("Construing a means-plus-function claim term is a two-step process. The court must first identify the claimed function.

Then, the court must determine what structure, if any, disclosed in the specification corresponds to the claimed function.”) (citing *Noah Sys., Inc. v. Intuit Inc.*, 675 F.3d 1302, 1311, 1318–19 (Fed. Cir. 2012)). The Court turns first to the construction of the term relative to independent claim 16.

### A. Independent Claim 16<sup>3</sup>

Claim 16 recites:

An apparatus for administering electrotherapy to a patient’s heart through electrodes external to the patient comprising:  
an energy source;  
two electrodes adapted to make electrical contact with a patient;  
**a connecting mechanism forming an electrical circuit with the energy source and the electrodes when the electrodes are attached to a patient;**  
an electrical parameter monitor; and  
a controller operating the connecting mechanism to deliver electrical energy from the energy source to the electrodes in a truncated exponential multiphasic waveform the relative phase durations of which are based on an electrical parameter monitored during delivery of the electrical energy.

(Docket No. 1-3 at 12:29–45) (emphasis added). The Special Master recommends, and the parties agree,<sup>4</sup> that the Court should find that the term “connecting mechanism” does not itself,

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<sup>3</sup> The parties initially disputed whether independent claim 16 needs to be construed at all given that Plaintiffs assert claim 17, not 16. The Special Master, however, recommends construing claim 16 and this Court agrees because asserted claim 17 is dependent on claim 16. See *Carroll Touch, Inc. v. Electro Mech. Sys.*, 15 F.3d 1573, 1576 (Fed. Cir. 1993) (“Although claim 24 was the only claim asserted at trial, it is dependent on claim 23, which in turn is dependent on claim 16, which in turn is dependent on independent claim 1. Thus, in addressing whether claim 24 was infringed by the accused EMS products, we must consider whether claim 1 was infringed.”) (citations omitted).

<sup>4</sup> Although, Plaintiffs have maintained throughout their briefs that the term “connecting mechanism” should not be construed to fall under § 112(f), they concede the point by asking the Court to adopt the Special Master’s Report and Recommendation in its entirety, including that the term should be construed as a means-plus-function term. (Docket No. 403).

or in conjunction with other language in the claim, include sufficient structure, and therefore constitutes a means-plus-function term under § 112(f). (Docket Nos. 400 at 3; 410 at 1; 412 at 7). Continuing, the Special Master next recommends, and the parties once again agree, that the function of the term is such that the “mechanism” connects an “energy source” to “electrodes.” (*Id.*). Accordingly, because the parties do not object to the Report and Recommendation relative to those issues, the Court adopts same.

The Court moves on to consider what corresponding structure, if any, exists to support the function. *Williamson*, 792 F.3d at 1351. Plaintiffs argue that the Court should deem both Figure 11 and its accompanying disclosures in the ’837 Application and Figure 4 and its accompanying disclosures in the ’454 Patent as corresponding structure for the purposes of § 112(f). (Docket No. 367 at 5-6). Given that the ’454 Patent is a continuation-in-part patent derived from the ’837 Application, (Docket No. 366 at 13), Defendant agrees that Figure 11 and its accompanying disclosures from the ’837 Application should be incorporated as structure. (Docket No. 393 at 16). Yet, Defendant maintains that Figure 4 and its accompanying disclosures in the ’454 Patent should not be included because those disclosures were added to the patent after the priority date of the ’837 Application. (Docket No. 410 at 5).

Upon consideration of the parties’ arguments, the Special Master recommends that this Court find both Figure 11 from the ’837 Application and Figure 4 from the ’454 Patent, and their accompanying disclosures, constitute corresponding structure for the term “connecting mechanism.” (Docket No. 406 at 9). The Special Master specifically recommends that the accompanying disclosures for Figure 4 of the ’454 Patent include:

[A] first embodiment disclosed at 6:49–7:33, and a second “specific implementation” embodiment at 7:34–50. . . . In the embodiment in Fig. 4 of the ’454 Patent, the “corresponding

structure” consists of four switches 56, 58, 60 and 62 in “connecting mechanism” 34, operated in the sequence discussed in the specification at 6:49–7:33. In the “second implementation” embodiment of the ’454 Patent, switches 58 and 60 are described as being implemented as SCRs, switch 56 is described as being implemented as two IGBTs, and switch 62 is described as being implemented as one or more IGBTs configured as described at 7:34-50.

(Docket No. 406 at 9).

Defendant objects to the Report and Recommendation for the same reasons it raised before the Special Master relative to Figure 4 and its accompanying disclosures, insisting that: (1) since Plaintiffs’ claim a 1993 priority date in their disclosures made pursuant to the Local Patent Rules, the Court should not incorporate any structure that was added in 1994; or in the alternative, that (2) should the Court find otherwise, the “accompanying disclosures” to Figure 4 should be limited to the embodiment disclosed at column 7, lines 39–48 of the specification because the other embodiments are too vague. (Docket No. 410 at 12). Plaintiffs respond that the Special Master appropriately considered and rejected Defendant’s position, and that Defendant’s argument relative to Figure 4 improperly conflates claim construction with priority contentions. (Docket No. 412 at 1–3). Further, Plaintiffs maintain that Defendant’s interpretation relative to the single embodiment found at column 7, lines 39–48 is too narrow and reads out other embodiments. (*Id.* at 3–6).

The Court finds Defendant’s objections unpersuasive. Initially, the Court agrees with the Special Master that Figure 4 and its accompanying disclosures should be considered structure despite Defendant’s priority-based contentions because priority issues are a separate consideration from claim construction. *See Liebel-Flarsheim Co. v. Medrad, Inc.*, 358 F.3d 898, 902 (Fed. Cir. 2004) (“[A]ny question regarding the support or lack of support for the claims in

the original disclosure bears on the issues of priority and validity, not on the issue of claim construction.”). Moreover, Defendant’s concern with Plaintiffs’ potential change of priority contentions in contravention of this District’s Local Patent Rules is premature.<sup>5</sup>

Turning to Defendant’s alternative objection, the Court is not convinced by Defendant’s reliance on *Fonar Corp. v. GE*, 107 F.3d 1543, 1551 (Fed. Cir. 1997), and *Faroudja Lab., Inc. v. Dwin Elecs., Inc.*, 76 F. Supp. 2d 999, 1012 (N.D. Cal. 1999), for the proposition that the accompanying disclosures to Figure 4 should be narrowed. In those cases, the courts found that the initial identified structure was too vague to constitute structure, and therefore, limited the corresponding structure to specific examples further disclosed therein. *Fonar*, 107 F.3d at 1551 (limiting structure to a “generic gradient waveform” despite patent language stating that “other waveforms may be used”); *Faroudja*, 76 F. Supp. 2d at 1012 (finding the term “field comparator” to be too abstract to convey structure and limiting structure to a preferred embodiment disclosing actual components comprising same). Unlike a vague reference to “other waveforms” or an abstract idea like a “field comparator,” the structure Defendant seeks to avoid here includes “four switches 56, 58, 60, and 62 operated by the controller 38 to deliver a shock from the energy source 32 to the patient.” (Docket No. 1-3 at 6:50–52). That language clearly denotes structure. Indeed, a decision upon which Defendant relies, *Serrano v. Telular Corp.*, held that less concrete language constituted structure for purposes of § 112(f). 111 F.3d 1578, 1583 (Fed. Cir. 1997) (“Serrano also argues that the structure for implementing the “determination means” should be limited to use of discrete logic circuitry, which is used in the embodiment

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<sup>5</sup> The Court agrees that the issue of priority is an important one and will order briefing from the parties on this dispute in the next phase of this litigation. The Court also notes that Plaintiffs have not sought leave to amend or supplement their priority dates at this time.



disclosed in the specification. We do not agree. Although the specification discloses such circuitry as a preferred embodiment, it also states that “it should be recognized to those of ordinary skill in the art that a microprocessor-based system could also be used wherein the logical decisions are configured in software.”) (quoting the patent-in-suit). The Court concurs with the Special Master that the structure supporting the term “connecting mechanism” is broader than the one example located at column 7, lines 39–48. Thus, after reviewing the parties’ arguments and the Special Master’s Report, *de novo*, the Court adopts the Report as it pertains to construing “connecting mechanism” within independent claim 16, and denies Defendant’s request to modify same.

Accordingly, the term “connecting mechanism” within independent claim 16 shall be construed as a “means-plus-function” term, with the function of the connecting mechanism being that it connects an “energy source” to “electrodes.” The corresponding structure shall be Figure 11 of the ’837 Application and its accompanying disclosures, as well as Figure 4 of the ’454 Patent and its accompanying disclosures, including:

[A] first embodiment disclosed at 6:49–7:33, and a second “specific implementation” embodiment at 7:34–50. . . . In the embodiment in Fig. 4 of the ’454 Patent, the “corresponding structure” consists of four switches 56, 58, 60 and 62 in “connecting mechanism” 34, operated in the sequence discussed in the specification at 6:49–7:33. In the “second implementation” embodiment of the ’454 Patent, switches 58 and 60 are described as being implemented as SCRs, switch 56 is described as being implemented as two IGBTs, and switch 62 is described as being implemented as one or more IGBTs configured as described at 7:34–50.

(Docket No. 406 at 9).

## B. Dependent Claim 17

Given that the Court construes independent claim 16 to fall within § 112(f), the inquiry turns to whether dependent claim 17 must be subject to § 112(f) as well. Dependent claim 17 recites:

The apparatus of claim 16 wherein the connecting mechanism comprises a plurality of switches for selectively directing electrical energy from the energy source to the patient in one of two polarities.

(Docket No. 1-3 at 12:46–49) (emphasis added). In accordance with 35 U.S.C. § 112(d),<sup>6</sup> the Special Master merged dependent claim 17 into independent claim 16 to read:

An apparatus for administering electrotherapy to a patient's heart through electrodes external to the patient comprising:

\* \* \*

a connecting mechanism forming an electrical circuit with the energy source and the electrodes when the electrodes are attached to a patient, wherein the connecting mechanism comprises plurality of switches for selectively directing electrical energy from the energy source to the patient in one of two polarities;

(Docket No. 400 at 17–18) (emphasis in original). Considering the merged claim, the Special Master recommends that claim 17 recites sufficient structure to avoid § 112(f). (Docket No. 400 at 19).

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<sup>6</sup> Section 112(d) states:

**Reference in Dependent Forms.**— Subject to subsection (e), a claim in dependent form shall contain a reference to a claim previously set forth and then specify a further limitation of the subject matter claimed. A claim in dependent form shall be construed to incorporate by reference all the limitations of the claim to which it refers.

35 U.S.C. § 112(d).

Defendant objects to the Special Master’s recommendation, advocating that claim 17 falls within § 112(f) because: (1) section 112(d) should require the means-plus-function aspect of independent claim 16 to be incorporated into dependent claim 17; (2) a dependent claim cannot provide substitute claim limitations for an independent one; and (3) other district courts have construed dependent claims to inherit § 112(f) limitations. (Docket No. 410 at 17, 19–20). Plaintiffs counter that the Special Master considered all of the arguments Defendant now raises and rejected them for valid reasons that this Court should adopt. (Docket No. 412 at 6–7).

The Court acknowledges the lack of binding precedent relative to Defendant’s first argument; however, after extensive review of the parties’ briefing and the Special Master’s thoughtful analysis as to same, the Court disagrees with Defendant’s position, and adopts the Report and Recommendation on this issue.

With respect to the second issue, Defendant cites *Monsanto Co. v. Syngenta Seeds, Inc.*, 503 F.3d 1352, 1359 (Fed. Cir. 2007) and *Alcon Research, LTD. v. Apotex Inc.*, 687 F.3d 1362, 1367 (Fed. Cir. 2012) to show that its interpretation “align[s] well with well-established precedent regarding dependent claims,” (Docket No. 410 at 18), but those cases do not address the issue at hand, and are not dispositive. *See Monsanto*, 503 F.3d at 1359 (finding that § 112(d) requires “all limitations of the claim incorporated by reference into the dependent claim” without explaining what “all limitations” comprises); *Alcon Research*, 687 F.3d at 1367 (addressing the inquiry of whether a dependent claim can be broader than the independent one it references).

On the third point, Defendant’s reliance on *Pfizer Inc. v. Ranbaxy Labs.*, 457 F.3d 1284, 1292 (Fed. Cir. 2006) and *Zircon Corp. v. Stanley Black & Decker, Inc.*, 452 Fed. App’x 966, 975 n.8 (Fed. Cir. 2011), for the proposition that a dependent claim cannot supply new or substitute limitations for the original parent claim is inapposite because the issue at hand

concerns evaluating the construction of a dependent claim alone. Moreover, the fact that the court in *Air Turbine Tech., Inc. v. Atlas Copco AB*, 295 F. Supp. 2d 1327, 1332–33 (S.D. Fla. 2003), came to a different conclusion than the Special Master did here does not sway this Court because the court in *Air Turbine* considered whether language in dependent claims could “save” an independent claim from § 112(f), whereas the issue here is whether a dependent claim, when viewed on its own, must fall within § 112(f) when the independent claim from which it derives was determined to be a “means-plus-function” term under § 112(f). *See id.*

Accordingly, after extensive review of the parties’ submissions before the Special Master, the Report and Recommendation reviewed *de novo*, and the parties’ filings related to Defendant’s objections to the Report and Recommendation, the Court adopts the Special Master’s Final Report and Recommendation as it relates to claim 17:

The claim term “connecting mechanism” within dependent claim 17 shall not be construed as a “means-plus-function” term under § 112(f).

## **VI. Conclusion**

For the forgoing reasons, Defendant’s Motion to Adopt-in-part, and Modify-in-part Special Master’s Report and Recommendation on Remand Regarding Supplemental Claim Construction, (Docket No. 409), is GRANTED, in part, and DENIED, in part. Defendant’s Motion is granted to the extent it requests that this Court adopt the Special Master’s final Report and Recommendation [406], and denied to the extent it seeks to modify same. An appropriate Order follows.

*s/Nora Barry Fischer*  
Nora Barry Fischer  
United States District Judge

cc/ecf: All Counsel of Record  
Special Master Gale R. Peterson